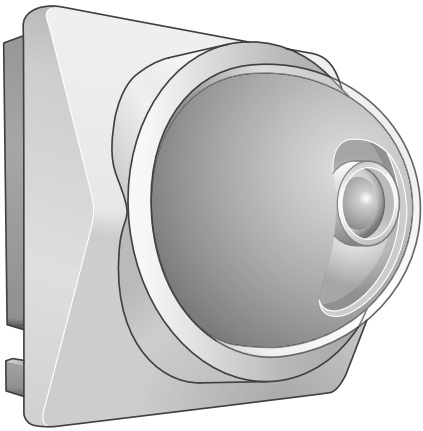
# TOSHIBA

NETWORK CAMERA

# Model: IK-WB01A
# IK-WB11A

## Basic User's Guide



For information on the latest products and peripheral devices, refer to the following Web page.
■ http://www.toshiba.com/taisisd

The above URL is subject to change without prior notice. If the URL changes, refer to theToshiba website (http://www.toshiba.com/taisisd).
If necessary, download "Advanced User's Guide" from above Toshiba website.
This User's Guide applies to the firmware version 2 ∗∗-2 ∗∗-2 ∗∗-1 ∗∗ and the later versions.

Product Name : NETWORK CAMERA
Model Number(s) : IK-WB01A, IK-WB11A

Tested To Comply
With FCC Standards
FOR HOME OR OFFICE USE

FCC Notice "Declaration of Conformity Information"

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Warning : Changes or modifications made to this equipment, not expressly approved by Toshiba or parties authorized by Toshiba could void the user's authority to operate the equipment.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions :
(1) This device may not cause harmful interference, and
(2) this device must accept any interference received, including interference that may cause undesired operation.

Toshiba America Information System, Inc.
Imaging Systems Division
9740 Irvine Boulevard,
Irvine, California 92618-1697
(800)288-1354

Industry Canada
This Class B digital apparatus complies with Canadian ICES-003.

# Introduction

Thank you for purchasing the IK-WB01A/IK-WB11A Network Camera. Before you start using the camera, read this User's Guide carefully to ensure correct usage. Once you have finished reading this User's Guide, keep it in a convenient place for future reference. The design, specifications, software, and User's Guide contents are subject to change without prior notice.
IK-WB01A is designed for indoor-use only. You may use IK-WB11A either inside or outside.

## Terms and Trademarks

- The term "OS" is used in this manual to indicate operating systems compatible with this product.
  - Windows 98SE: Microsoft® Windows® 98 operating system; Second Edition
  - Windows 2000: Microsoft® Windows® 2000 operating system
  - Windows XP: Microsoft® Windows® XP operating system
- The formal name of Windows® is Microsoft® Windows® Operating System.
- Microsoft® and Windows® are trademarks or registered trademarks of Microsoft® Corporation in the United States and other countries.
- Other product names appearing in this User's Guide may be trademarks or registered trademarks of their respective holders.
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- Netscape™ and Netscape™ Navigator are registered trademarks of Netscape™ Corporation.
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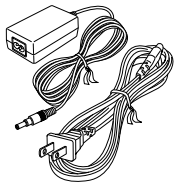
## Accessories

Confirm that all of the following accessories have been supplied with the network camera.

● Accessories common to IK-WB01A and IK-WB11A

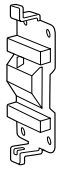
AC adaptor (x1)
Power cord (x1)



User's Guide (x1)
(this document)
Quick Start Guide (x1)

● Accessories for IK-WB01A

Wall attachment for indoor use (x1)

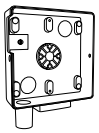


Screw set
- Self-tapping screw (x1) (Black)
- Wood screws (x4) (Silver)

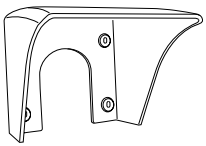
Wire clamp (x1)
LAN cable (Straight-through cable) (x1)
Clamp filter (x2)
※ Put the Clamp filter to both ends of your LAN cable.

● Accessories for IK-WB11A

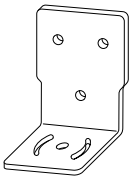
Rear cover (waterproof cover and attachment holder for indoor and outdoor installation) with a tripod screw hole (x1)



Sun visor (x1)



Wall bracket (x1)



Screw set
- M4 screws (x6) (Silver)
- M3 screws (x4) (Black)
- Self-tapping screw (x1) (Black)
- Wood screws (x4) (Silver)

LAN cable (Straight-through cable) (x1)
Wire clamp (x1)

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# IMPORTANT SAFETY INSTRUCTIONS

When using this camera, always follow basic safety precautions to reduce the risk of fire, electric shock, or personal injury.

1. Read and understand all the instructions.
2. Keep the User's Guide for future reference.
3. Heed all warnings.
4. Follow all the instructions.
5. Wipe off any dust on the camera lens with a lens-cleaning cloth.
6. Do not place the camera near any heat sources such as radiators, heat registers, stoves, or other devices (including amplifiers) that produce heat.
7. Protect the power cord from being stepped on or pinched particularly at plugs, convenience outlet, and the point where they exit from the unit.
8. Use only specified attachments/accessories such as stands, tripods, and brackets.
9. Do not touch the camera or the AC adaptor during lightning storms.
10. Unplug the power cord when you do not use the camera for a long period of time.
11. Refer all the services to qualified service personnel. Repairing is required when the camera has been damaged in any way, such as :if power cord or plug is damaged; the camera does not operate normally, the camera has fallen to the ground.

## About the SD Memory Card(IK-WB11A only)

- There is a limit to the number of rewrites that is possible with the SD memory card. Replacing of the SD memory card when performing periodic maintenance of the camera is recommended.
- The camera supports the following SD memory cards. Do not use memory cards with other specifications.
  SD memory card: 8, 16, 32, 64, 128, 256, and 512 MB SD memory cards (3.3 V) supported.
  Physical interface: Part 1. Physical Layer Specification; Version 1.01
- Images may not be recorded or read correctly if an unsupported SD memory card is used with the camera.
- Carefully read the User's guide, precautions on use, and any other information supplied with a purchased memory card.
- An SD memory card can be used for the loop recording of images. The life-span (number of rewrites possible) of an SD memory card is greatly affected by the capacity of the SD memory card. The use of a 128, 256, or 512 MB large-capacity SD memory card is recommended for loop recording.
- To achieve maximum performance of the camera, the use of a Toshiba SD memory card is recommended. If a card of another company is used, the recording intervals may lengthen and the erasure time during overwriting may increase. As a result, the number of delivered frames of live video may decrease.
- Do not use a memory card containing the data recorded by another device with the camera as this may result in the camera not functioning correctly.
- Do not modify, overwrite the data, or change the folder name of an SD memory card. It may result in the camera not to function correctly.
- Data recorded with the camera do not comply with the image file format Exif and the DCF standard. If the SD memory card is to be removed to play images, use a personal computer to play the images. Other devices may not be capable of displaying the images.

## Caution for wireless mode

- During wireless mode operation, try to leave minimum of 20cm (8 inches) spacing between people and the equipment.

# About the AC adaptor

Be sure to use only the supplied AC adaptor. Using a different AC adaptor may cause the camera to malfunction, heat up, or catch fire. Before using the AC adaptor, carefully read and observe the Important Safety Instructions (→page 6) and the notes below.

- Do not allow the connectors on the AC adaptor to come into contact with any other metal object as this may result in short circuit.
- To connect the AC adaptor, firmly insert the plug on the end of the cable into the AC adaptor jack. Do not insert the plug into other jacks as this may cause a malfunction.
- When removing the connection cable, disconnect the cable by holding its plug. Do not disconnect the cable by pulling on the cable.
- Do not drop the AC adaptor or subject it to strong impact.
- Do not use the AC adaptor in hot and humid places.
- Do not use the supplied AC adaptor with devices other than this camera.
- Temperature increasing on the surface of the adaptor is normal. Before moving the adaptor to another location, unplug it from the wall outlet, and wait until its temperature decreases.
- Buzzing noises may come from inside. This does not indicate malfunction.
- Using the AC adaptor near a radio, TV, or cellphone may cause interference. Use the adaptor at sufficient distances from these devices.

## Specifications

### AC adaptor (AC-WB10)

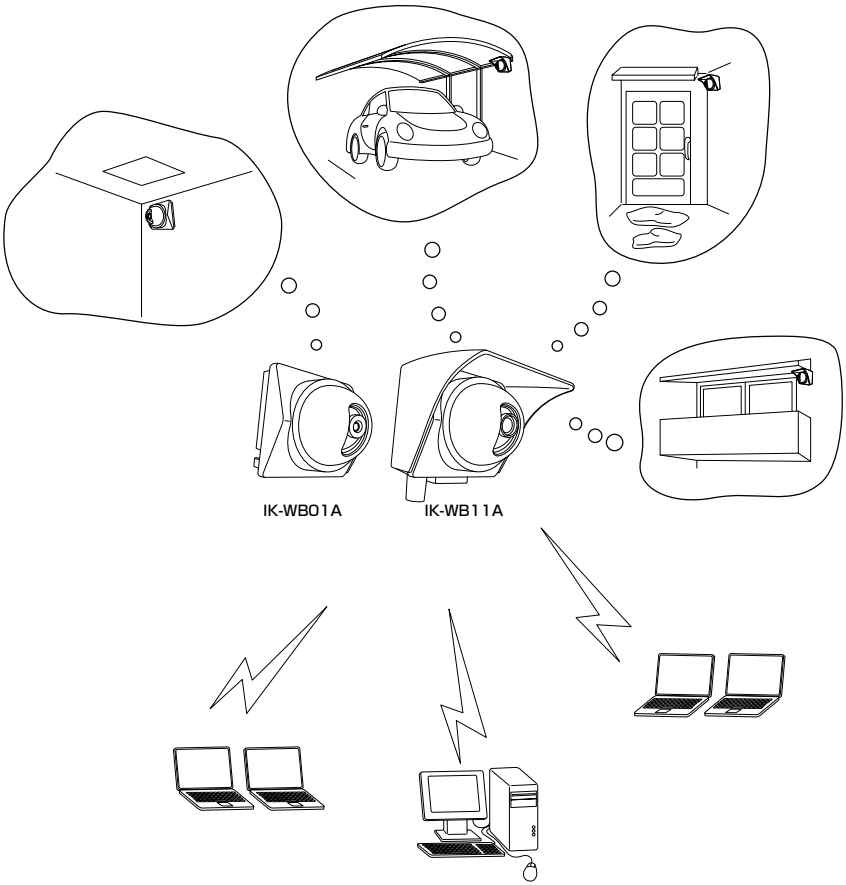
| | | |
|---|---|---|
| Power supply | : | 100 to 240 V AC, 0.5 A, 50/60 Hz |
| Rated output | : | 10 V DC, 1.5 A |
| Operating temperature | : | -20℃ to +50℃ (-4°F to +122°F) |
| Storage temperature | : | -20℃ to +65℃ |
| External dimensions | : | 50 x 32 x 85 mm (W / H / L) |
| Length of the cord | : | 10 m |

# Overview of the Network Camera

The IK-WB01A/IK-WB11A network camera can deliver video images and sound in real time using the Internet or an intranet. The camera is equipped with Ethernet (RJ-45) 10BASE-T/100BASE-TX and wireless LAN IEEE 802.11b network interfaces.

IK-WB11A can be used in various indoor and outdoor environments.

IK-WB01A should be used indoors only.



# Features of the Camera

- **Supports wireless LAN**
  The camera equips the wireless LAN IEEE 802.11b system. This enables you to connect the camera and your computer without using a LAN cable.
- **Built-in pan/tilt mechanism**
  A built-in pan (left/right) and tilt (up/down) mechanism enables you to use the Internet browser to change the direction of the camera lens. The camera also comes with Scan, Presets, Auto Patrol and various other monitoring features.
- **Equipped with 350K pixel Color CCD (IK-WB01A)**
  A 350K pixel, color CCD enables the delivery of images up to 640 x 480 dots.
- **Equipped with megapixel CCD (IK-WB11A)**
  A 1.45 megapixel, progressive CCD enables the delivery of images up to 1280 X 960 dots. Images are delivered at high resolutions approaching those of digital cameras.
- **Supports multiple cameras**
  Toshiba's original protocol, RNCP, allows Toshiba network cameras to identify each other on the same network. This enables images from automatically identified network cameras to be displayed in multi-view screen in the same browser window.
  The number of windows in the multi-view display automatically changes (4 (2 x 2), 9(3 x 3) or 16(4 x 4) windows) accordingly to the number of identified cameras.
  The cameras on other networks can be displayed on the same multi-view display screen by registering the cameras manually.
- **Capable of delivering sound**
  The products deliver the sound input from an external microphone (IK-WB11A) or built-in microphone (IK-WB01A) to you via the network.
- **Mailing function**
  This feature allows you to receive mail messages with images when alarms go off.
- **Built-in SD memory card interface (IK-WB11A)**
  The use of SD memory cards enables the recording of images for long periods of time, as well as recordings when alarms go off.

  SD memory card: 8, 16, 32, 64, 128, 256, and 512 MB SD memory cards (3.3 V) supported.

  Physical interface: Part 1. Physical Layer Specification; Version 1.01
- **Motion detection (IK-WB11A)**
  The camera incorporates the motion detector to generate an alarm.
- **Privacy mask function (IK-WB11A)**
  This feature effectively maintains the privacy of delivered images. It allows you to specify the masking areas in images.
- **Equipped with a high-resolution, low F-stop lens (IK-WB11A)**
  The camera is equipped with a high-resolution, F1.4 high-quality lens for full reproduction of images at a resolution of 1.45 megapixels.
- **Waterproof camera that can be used outdoors (IK-WB11A)**
  A waterproof structure facilitates outdoor use. ＊1
  Waterproof specifications: IPX3 (Weather Resistant Rating)

  ＊1 : Be sure to attach the Sun visor when installing the camera outside. Install the camera where it will not be exposed to direct rain or sunlight. Also, consult with the installation workers to ensure that the AC adaptor, power cord, and LAN cable are installed with protection against the weather in an outdoor location.

● **High Sensitivity (IK-WB11A)**
The camera accomplishes highly sensitive night-time monitoring by using a slow-shutter speed (up to 4 seconds), Simple DAY/NIGHT function, and an auto sensitivity boost function.

● **Employs ND (Neutral Density) switching mechanism (IK-WB11A)**
Outdoor and indoor location monitoring is made possible because of the ND switching mechanism even though the camera has a fixed-iris lens.

## Requirements for Network Camera Monitoring System

○ Administrator's personal computer

This camera cannot be used by itself. Be sure to connect the camera to a personal computer and network. This User's Guide refers to a personal computer that has been granted all privileges for configuring, operating, monitoring, and other operations as the "administrator's personal computer."

System recommended requirements

- Windows® 2000/XP
- Internet Explorer™ Ver. 6.0 or Netscape™ Navigator 7.0
- CPU: Intel® Pentium® III 500 MHz or greater
- Memory: at least 256 MB
- Requires the installation of the freeware "Java™ 2 Runtime Environment SE ver.1.4.2" of Sun Microsystems, Inc. of the United States. (The Version at present (July 2003))

※ If "Java™ 2 Runtime Environment SE Ver.1.4.2" is not installed, this product may not output images or sound properly.

※Access the following website to download "Java™ 2 Runtime Environment SE."

http://java.com

The URL may change without prior notice.
Downloading the setup file using dial-up communication is not recommended because the setup file size exceeds 10 MB. It is recommended to use broadband communication to download this file.

※ Java™ 2
This is the second generation of the Java™ programming language promoted by Sun Microsystems, Inc. of the United States. There are improvements in performance, stability, security, and interoperability compared with the previous generation.

※ This User's Guide refers to a personal computer that is used just for monitoring images as a "user's personal computer." Multiple users' personal computers can monitor images from a single network camera. For details, refer to the Advanced User's Guide (See cover page).

○ Network camera (this product)

- Purchase the required and appropriate number of cameras for the installation location and the environment of the building or other location.

○ Appropriate connection devices (hub, router, etc.) and LAN cable for the network system environment

- Not required if you are going to connect the personal computer and network camera directly using a wireless LAN.
- The type of LAN cable depends on the connection method used. For details, refer to "Using LAN Cable" (→ page 24).

○ Select appropriate fixtures for the network system environment

- Mounting the camera directly to the wall → Fix the camera in place with the attachment (accessory)(IK-WB01A(→ page 16))(IK-WB11A(→ page 18))

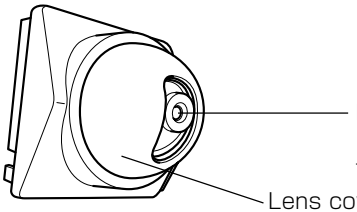
○ Install the camera search application ("Camera Finder")

- Download "Camera Finder" from <http://www.toshiba.com/taisisd> , and then install it. (→ page 34)

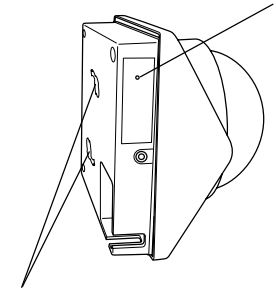
# Setting up the Network Camera Enviroment (Cont.)

## Names of Camera Parts (IK-WB01A)

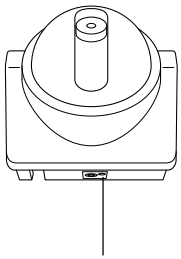
### Front



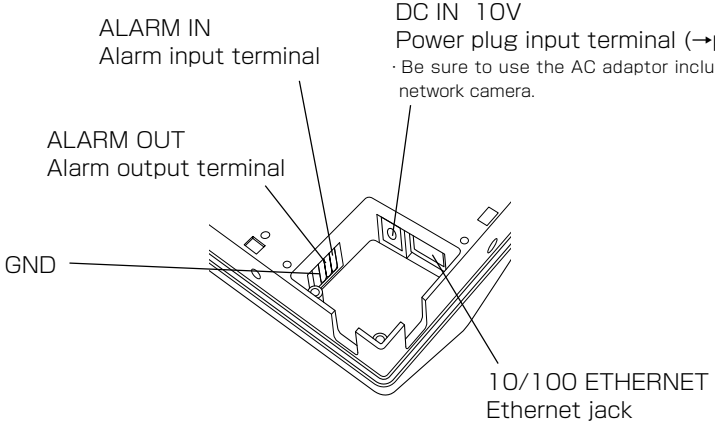

### Side




### Bottom

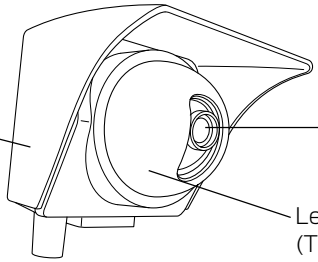



### Rear



## Names of Camera Parts (IK-WB11A)

### Front

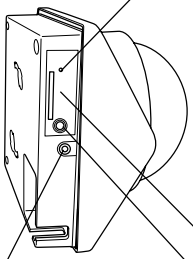


Sun visor (→page 19)
(Accessory)

Lens
(Focal range: 80 cm to infinity)

Lens cover
(Transparent sphere)

### Side



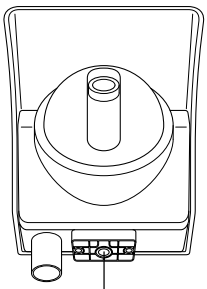
Rear cover fixing screw (M3)
(→page 19)

Reset button (→page 39)
- Reset the settings to the defaults by using a thin, pointed object to press the button for at least 5 seconds. (The AC adaptor must be connected)
  (The log information is not returned to the default state. To return the log information to the default state, delete the log information in the settings screen.)
- You can turn video output on/off by pressing the button for less than one second. When video output is on, images and sound cannot be delivered to the network and images cannot be recorded. Use this feature only when, for example, checking the angle of view during installation.

SD memory card slot (→page 7)

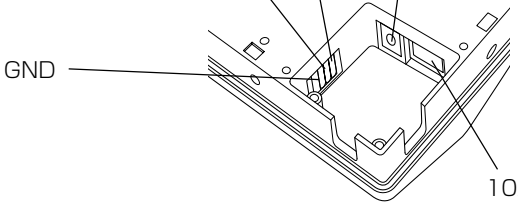
Microphone input/Video output jack
- Jack for connecting an external microphone. Use 3.5 $\phi$ monaural-plug microphone.
- Sound input from a microphone. Video signal can be simultaneously output if you use a stereo mini plug to mono dual jack conversion adaptor (commercially available product).
- Use the reset button to turn video output on/off.

### Bottom



Screw hole for attaching a tripod or other stand

### Rear



ALARM IN
Alarm input terminal

DC IN 10V
Power plug input terminal (→page 21)
- Be sure to use the AC adaptor included with the network camera.

ALARM OUT
Alarm output terminal

GND

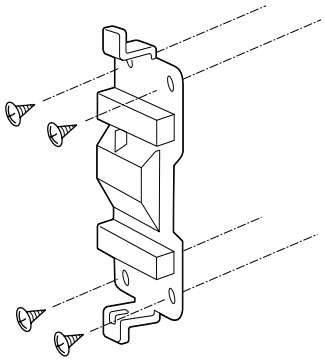
10/100 ETHERNET
Ethernet jack

# Installing the Camera (IK-WB01A)

The IK-WB01A is for indoor use only. The following explains the installation procedure.

## 1 Set the wall attachment to the wall

· Attach each of the four corners to the wall using four wood screws .



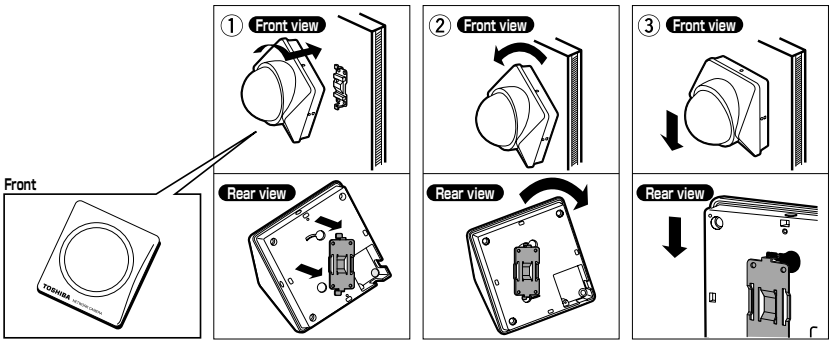
**Important**

- Securely tighten the screws during installation to ensure not to become loosen.

## 2 Connect the AC adaptor cable and the LAN cable to the camera

· For details, refer to "Connecting the Power Cord" (→page 21) .
· If you are going to use a wireless LAN, you need to connect the AC adaptor cable only.

## 3 Set the camera to the wall attachment




① Place the camera to the wall attachment at the angle shown in the picture.
② Turn the camera counter-clockwise.
・Make sure that the camera and wall attachment are properly fitting together.
③ Push down the camera perpendicularly.

**Important**

- Take care not to pinch the power cable and the LAN cable between the camera and wall when attaching the camera to the wall attachment.
- Securely tighten the screws during installation to ensure not to become loosen.

# Installing the Camera (IK-WB11A)

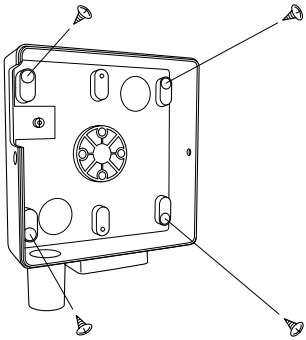
Some provided parts are required for installing the camera.

- Installing the camera indoors
  · Rear cover
- Installing the camera outdoors
  · Rear cover
  · Sun visor

## ■ Indoor Installation

### 1 Install the rear cover to the wall

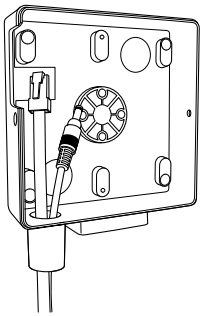
· Install each of the four corners to the wall using four wood screws.



**Important**

- Securely tighten the screws during installation to ensure not to become loosen.

### 2 Insert the AC adaptor cable and the LAN cable through the tube part of the rear cover



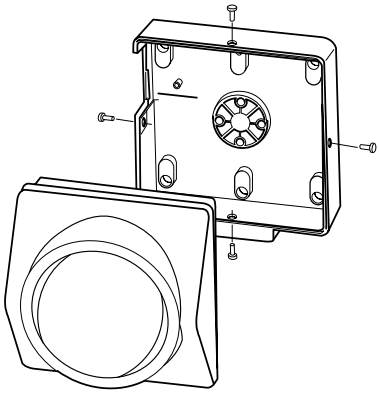
· Insert both cables from below.
· If you are going to use a wireless LAN, you need to insert the AC adaptor cable only.

## 3 Connect the AC adaptor cable and the LAN cable to the camera

- For details, refer to "Connecting the Power Cord" (→page 21) .
- If you are going to use a wireless LAN, you need to connect the AC adaptor cable only.

## 4 Install the camera to the rear cover

- Fix the camera to the rear cover from the sides using four M3 screws.



**Important**

- Take care not to trap the AC adaptor cable and LAN cable when attaching the camera to the rear cover.

### ■ Outdoor Installation

## 1 Insert the AC adaptor cable and the LAN cable through the tube part of the rear cover

- The procedure is the same as that described in "Indoor Installation" Step 2 on page 18.
- Insert both cables from below.
- If you are going to use a wireless LAN, you need to insert the AC adaptor cable only.

# Installing the Camera (IK-WB11A) (Cont.)

## 2 Connect the AC adaptor cable and LAN cable to the camera

· The procedure is the same as that described in "Indoor Installation" Step 3 on page 19.

## 3 Attach the camera to the rear cover

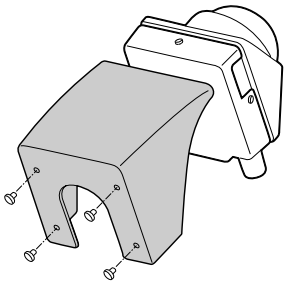
· The procedure is the same as that described in "Indoor Installation" Step 4 on page 19.
·Fix the camera to the rear cover from the sides using four M3 screws.

**Important**

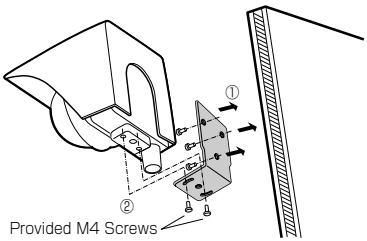
- Take care not to pinch the AC adaptor cable and the LAN cable when attaching the camera to the rear cover.

## 4 Set the Sun visor

·Fix the cover for outdoor installation in place from the rear using four M4 screws.



## 5 Mount the camera directly to the wall using the wall bracket (accessory)

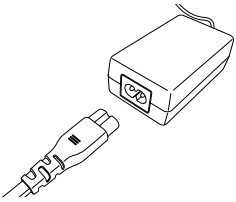



**NOTE**

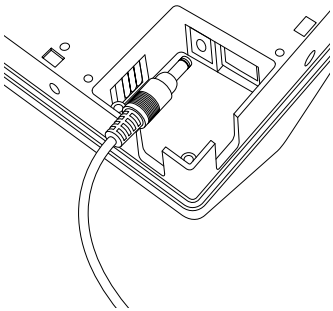
- The screws which attach the wall bracket and the wall are not provided. Choose the best screws for your wall when you buy screws at a store.

# Connecting the Power Cord

## 1 Connect the power cord to the AC adaptor



## 2 Insert the AC adaptor plug into the camera power terminal



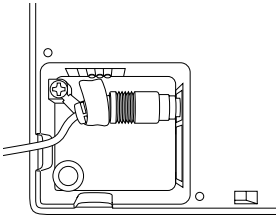
**Important**

- There is not much space around the opening of the power terminal, so make sure that the plug is properly inserted. The camera may not work properly if the plug is not inserted properly.

# Connecting the Power Cord (Cont.)

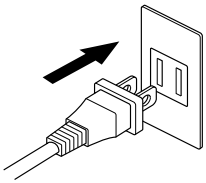
## 3 As shown in the figure below, use a wire clamp to fix the plug in place

- For the wire clamp, use the self-tapping screw supplied with the camera to hold.
- When the plug is fixed in place, check that it will not become disconnected by a moderate amount of pulling.



### Turning on the Power

The camera has no main power switch or button. To turn the power on, insert the plug of the power cord into a power outlet.
Turn the power on after you have installed the camera.



**NOTE**

- If you turn the power on without connecting the LAN cable, the network camera starts in wireless LAN mode.
- If you connect the LAN cable and then turn the power on, the network camera starts in ordinary LAN mode.

## ■ About the IP Address

To connect to the network, the administrator needs to set the network camera IP address.

There are two options to set the IP address.

- Obtaining an IP address automatically from the DHCP server
- Entering an IP address manually (→page 36)

### ●Obtaining an IP address automatically from the DHCP server

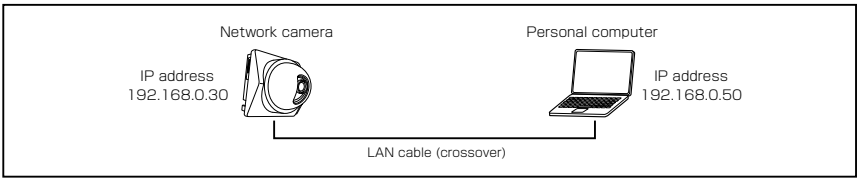
The "DHCP" setting is set to "ON" by default. If your network is using DHCP server, keep the setting in that way.

## Using LAN Cable

The following shows two different network configurations using a LAN cable connection to operate the network camera.

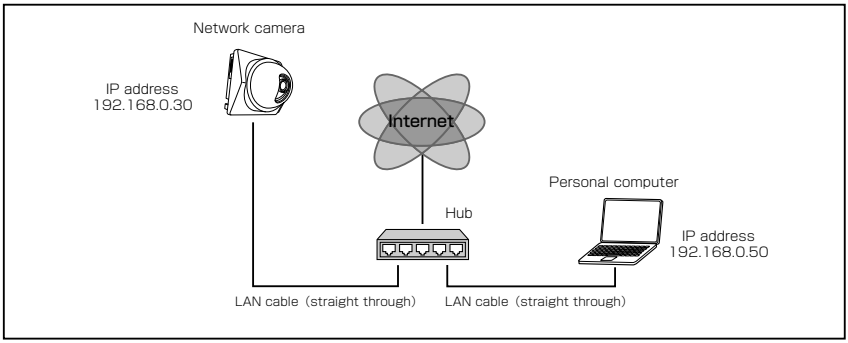
- Crossover connection
- Connection via a hub

● Using a crossover cable to establish a connection (example)




Crossover cable is not provided with the product.

● Establishing a connection via a hub (example)




**NOTE**

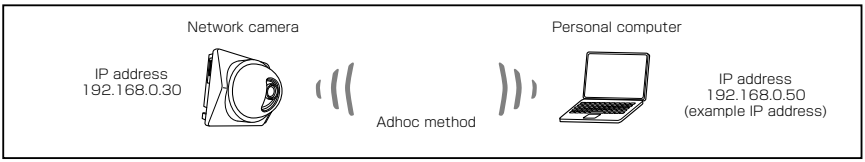
- You do not need to assign an IP address to a hub.
- In the case of not using DHCP server, the IP address for the camera is automatically set to 192.168.0.30 in default. Therefore, set the IP address for your computer to 192.168.0.50 here.
- There will be no problem to use the LAN port of your broadband router instead of using a hub.
  However, when using the broadband router, if the DHCP server function is set "ON" and turn on the power after connecting the camera with the router, the camera gets the IP address from the router's DHCP server and it may not be 192.168.0.30.
  For more information, read your user's guide for broadband router.
  It is also recommended to set the computer's IP address from the router's DHCP server.
  For more information, read your computer's user's guide.

## Using Wireless LAN

The followings show different network configurations using a wireless LAN connection to operate the network camera.

### ■ When using adhoc method

The adhoc method is used for connecting the network camera and a personal computer.

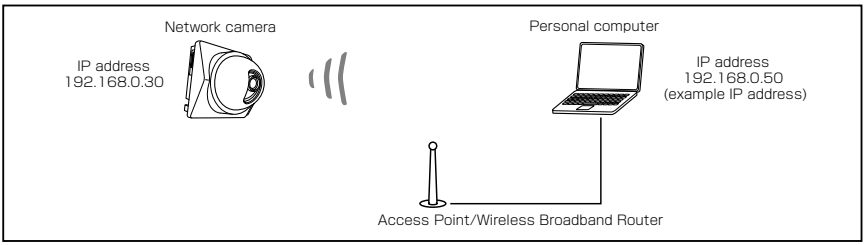



Using a wireless LAN to establish a connection requires the following conditions.

1. Both the network camera and the personal computer are on the same network segment.
2. Both the network camera and the personal computer use the same communication channel. (→ page 32)
3. Both the network camera and the personal computer have the same ESS-ID set. (→ page 32)
4. If WEP is used, both the network camera and the personal computer use the same WEP encryption/key. (→ page 33)

### ■ When using infrastructure

Connect the network camera and a personal computer via an Access Point/ Wireless Broadband Router.



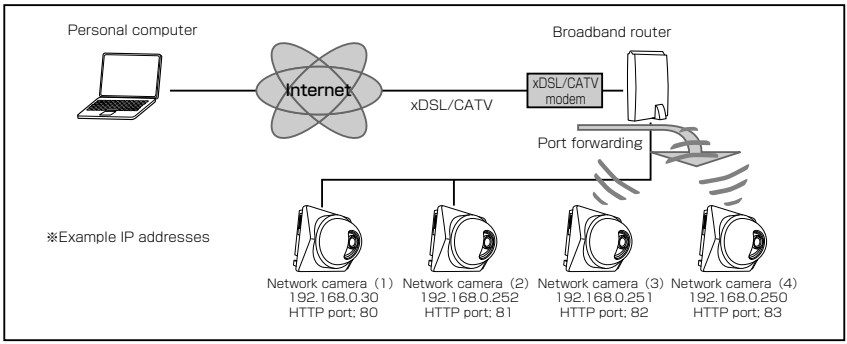

Using an intranet requires the following condition.

・The default gateway is set correctly for the network camera if the network camera will be accessed from different networks.

**NOTE**

- Information may be intercepted if you use a wireless LAN connection. Improve security by using WEP key. (→ page 33)
- Communication using a wireless LAN connection is slower compared to that of a wired connection, therefore, less image frames can be delivered.
- If you use a wireless LAN connection, the effect of obstructions and distance may result in slower communication speeds and the inability to deliver images. If this is the case, you may be able to achieve slight improvements by decreasing image and file sizes.

• Using port forwarding to publish images (example)




Using port forwarding to publish images requirs the following conditions.

・Ask your provider if it is possible to have port-forward connection.
・Must be able to do port-forward setting with your broadband router. (Some products may refer it as "port forwarding", "static IP masquerade" or "NAPT".)

## About Wireless LAN Connection

There are two methods to establish the wireless LAN connection.

1. Cofiguring the wireless network environment for the camera's wireless LAN settings.
2. Cofiguring the camera's wireless LAN settings for the wireless network environment.

The default settings of the network camera are as follows:

● **Network information**

| | |
|---|---|
| Camera name | : nwcam01 |
| IP address | : 192.168.0.30 |
| Subnet mask | : 255.255.255.0 |

● **Wireless LAN settings**

| | |
|---|---|
| Connection mode | : Adhoc method |
| ESS-ID | : ikwb |
| Communication channel | : Channel 10 |
| WEP | : None |

### ■ Configuring the wireless network environment for camera's wireless LAN settings

Install a wireless LAN board or wireless LAN card into your personal computer.

### 1) Turn on the power of the camera

**NOTE**

- Ensure that the LAN cable is not inserted. If the LAN cable is inserted before plugging in the camera, the network camera does not start in wireless LAN mode.

### 2) Set the IP address of the personal computer

- Set the IP address which you are not using other than 192.168.0.30 (camera's IP address).
  - ・Set the IP address to 192.168.0.50 (and subnet mask to 255.255.255.0) as an example.
  - ・For details on the procedure, refer to the user's guide of the personal computer.

### 3) Change the wireless LAN settings of the personal computer

- Set the same settings as "Wireless LAN settings" of the network camera.
  - ・For details on the procedure, refer to the user's guide of the installed wireless LAN card/board.

## 4) Make sure of the reply from the personal computer to the network camera

- Start a command prompt. Type as "ping 192.168.0.30" and press "Enter" key.
- If the "Reply from..." message appears, the wireless connection is correctly established.
  - · If a message other than the above appears, reconfirm that the LAN cable is not connected to another device and reconfirm the settings configured in (2) and (3).
  - · If you can still not ping the camera, connect the personal computer and the camera with a LAN cable and then check the camera's network settings to make sure that the wireless LAN settings are set as described above.
  - · If there is still a problem, contact the Support Center (→ cover page).

## 5) Try viewing camera images with "Camera Finder" (→ page 34)

a) Start "Camera Finder" and click the "Search" button.
- Confirm that the camera name "nwcam01" and the IP address "192.168.0.30" are displayed in the camera list.
- If they are not displayed, perform Step 3) again.

b) Click camera name, "nwcam 01", to select.
- Confirm that the camera name and the IP address are displayed in red in the network camera login field.

c) Click the "Administrator" button.

d) When the login screen appears, perform the administrator login (→ page 42).
- If the login screen is not displayed, select "Customize" from the "View" menu.
- In the "Customize" dialog box, check the Browser setting to see whether a browser has been installed.
  - · The following shows the default setting.
    C:\Program Files\Internet Explorer\IEXPLORER.EXE

e) When the "Admin Menu" screen is displayed, click the "LIVE" button.
- Images are displayed in single view.
- If images are not displayed, check whether JAVA™ 2 is installed on the personal computer.
- Install JAVA™ 2 if it is not installed (→ page 12).

**NOTE**

- To view an image without using "Camera Finder", start the browser and perform the administrator login (→page 42). Then click the "Live" button.

## ■ Configuring the camera's wireless LAN settings for the wireless network environment

Beforehand, connect the LAN cable (straight cable) to a hub that has the power turned on or connect the LAN cable (crossover cable) to a personal computer that has the power turned on.

### 1) Plug in the camera

### 2) Set the IP address of the personal computer (→page 27)

### 3) Make sure of the reply from the personal computer to the network camera (→ page 27)

### 4) Change the wireless LAN settings of the camera

a) Start the "Camera Finder" (→ page 34) and click the "Administrator" button.
b) Click "Network Settings" → "Wireless LAN" in the "Admin Menu".
c) Configure the settings to match those of the wireless network environment.
· The communication mode is set to the adhoc method by default. If you are going to view images via an access point or wireless broadband router, be sure to change the communication mode to infrastructure method.
d) Click the "Save" button.
e) Click the "Reboot" button.

**NOTE**

- To view an image without using "Camera Finder", start the browser and perform the administrator login (→page 42). Then click the "Live" button.

### 5) Change the network information of the camera

a) Start the "Camera Finder" (→ page 34) and click the "Administrator" button.
b) Click "Network Settings" → "General"
c) Configure the settings to match those of the wireless network environment.
d) Click the "Save" button.
e) Click the "Reboot" button.

**NOTE**

- To view an image without using "Camera Finder", start the browser and perform the administrator login (→page 42). Then click the "Live" button.

## 6) Plug in the camera

a) Confirm that the settings are the same as the wireless network environment.
- When any settings are different from the wireless network enviromment, set the same values.

b) Disconnect the LAN cable from the camera.
c) Unplug the camera once and plug it in again.

## 7) Confirm the camera connection

a) Ping the IP address set for the camera from a personal computer on the network.
- Start a command prompt. Type as "ping n.n.n.n (IP address set for camera)" and press "Enter" key.
  If the "Reply from..." message appears, the wireless connection is correctly established.
  · If a message other than the above appears:
  Start "Camera Finder" (→ page 34) and try performing a search.

**NOTE**

- "Camera Finder" can find the camera even if the IP address of the camera is incorrect (even if the wrong network address is specified).

- Check whether the IP address of the camera found is the one you set as your network address.
  · If "Camera Finder" was unable to find a camera, place the front of the camera close to the antenna of the access point or wireless broadband router and unplug the camera once and plug it again.

## Configuring Settings for Wireless LAN

To establish a wireless connection, it is necessary for the administrator to configure the appropriate wireless LAN settings. The administrator also needs to set the IP address. For details on setting the IP address, refer to "About the IP Address" (→page 23).

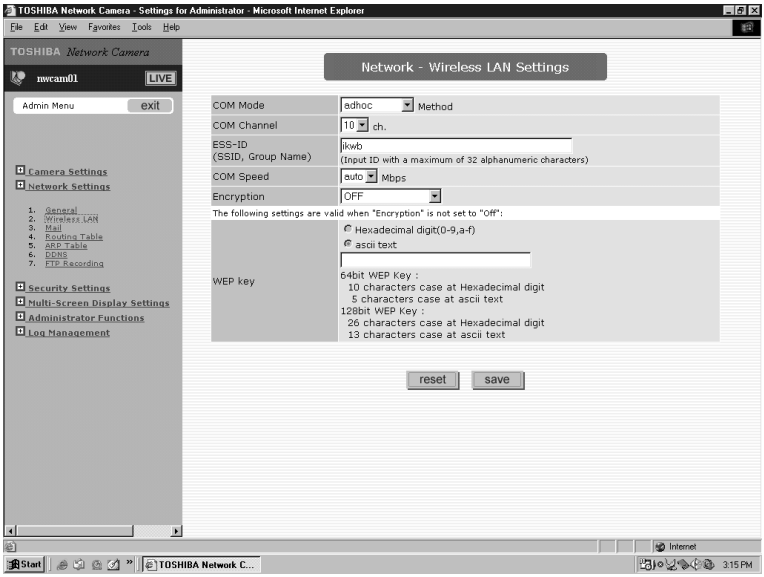
### 1 Perform administrator login (→page 42) to open the Admin menu

### 2 In the left side of the window, click the toggle (+) of "Network Settings"

· The sub menus appear.

### 3 From the list of sub menus, click "Wireless LAN"

· The settings appear in the right side of the window.



## 4 Configure the communication mode

① Click ▼ for the "COM Mode" setting in the right side of the window.

② Select an item from the pull-down menu.

・If you are going to connect the network camera to the network via a wireless broadband router or access point (AP), select "infrastructure." If you are going to connect the network camera directly to a personal computer, select "adhoc."

## 5 Configure the communication channel

① Click ▼ for the "COM Channel" setting in the right side of the window.

② Select an item from the pull-down menu.

・Channels 1 to 11 are available for use. If you are configuring the network camera to work in an existing wireless LAN environment, select the same channel.

**NOTE**

- If you cannot establish a satisfied wireless connection, try other channels and select the channel that enables the optimal connection.
- To have communication in adhoc method with the computer which cannot change the communication channel, start up the network camera in wireless LAN mode before turning on your computer.
- The network camera can communicate only on the configured channel of the camera.

## 6 Enter the ESS-ID

・If you are connecting the network camera to an existing wireless LAN, set the same ESS-ID as the existing wireless LAN environment. If you are configuring a new wireless LAN, make sure that you do not set the same ID as another existing wireless LAN.

**Important**

- There are restrictions on the values you can enter. You can only enter up to 32 alphanumeric characters.

**NOTE**

- ESS-ID is sometimes simply expressed as SS-ID, SSID, or network group name. In this manual, we use "ESS-ID." This setting is an ID for identifying the wireless group when multiple wireless LAN groups exist in the network environment.

## 7 Configure the communication speed

① Click ▼ for the "COM Speed" setting in the right side of the window.

② Select an item from the pull-down menu.

・You can set "1.0," "2.0," "5.5," "11" Mbps, or "auto." It is recommended to select "auto."

**NOTE**

- This setting determines the speed of the network camera communicating with other devices on the wireless LAN. The IEEE 802.11b standard supports the communication speeds of 1.0, 2.0, 5.5, and 11 Mbps. However, it is recommended to select "auto."

## 8 Configure the WEP key

① Click ▼ for the "WEP Key" setting in the right side of the window.

② Select an item from the pull-down menu.

- This setting determines the method used to encrypt data transferred during wireless communication. Typically, 64-bit and 128-bit WEP keys are used. (128-bit WEP sets tighter security)
- You can select either of the two WEP keys or select not to use an encryption key. If you are connecting the network camera to an existing wireless LAN that uses a WEP key, set the same WEP key to the network camera.

**NOTE**

- WEP setting is not mandatory. Do not perform the WEP setting if you are not using WEP with your current wireless LAN.
- When you use "Encryption" with the "WEP Key" for the network camera, select the items for encryption and WEP key correctly. There are rules for entering the WEP keys used for wireless data encryption. Enter a 10-byte (hexadecimal digits) or 5-byte (ASCII text) character string for the 64-bit WEP key, and a 26-byte (hexadecimal digits) or 13-byte (ASCII text) character string for the 128-bit WEP key. Configure the WEP key by referring tables below.
- Sometimes "64-bit WEP" is described as "40-bit WEP", in here, we use the term "64-bit WEP." This means that other wireless devices using 40-bit WEP are using the same level of security as and are compatible with devices that use 64-bit WEP.
- When you do not perform encryption of the data by WEP, your wireless communication could be intercepted easily by third party. By using WEP for your data encryption, it becomes very difficult to decode the data. Because of this, it is recommended to do WEP setting if you are using wireless communication.

**WEP Key Setting**

| | 64bit WEP Key | 128bit WEP Key |
|---|---|---|
| ASCII text | Number of Characters: 5 characters<br>Characters You Can Use:<br>Alphanumeric characters (0 to 9, a to z, A to Z) | Number of Characters: 13 characters<br>Characters You Can Use:<br>Alphanumeric characters (0 to 9, a to z, A to Z) |
| 16 hexadecimal | Number of Characters: 10 characters<br>Characters You Can Use:<br>Alphanumeric characters (0 to 9, a to f, A to F) | Number of Characters: 26 characters<br>Characters You Can Use:<br>Alphanumeric characters (0 to 9, a to f, A to F) |

※There is no distinction between capital letters and small letters.

**WEP Key Setting (Example)**

| | 64bit WEP Key | 128bit WEP Key |
|---|---|---|
| ASCII text | nwcam | toshibaikwb01 |
| 16 hexadecimal | abcd1048ef | 1234567890abcdef0987654321 |

# Using the Camera Search Application "Camera Finder"

The camera search application "Camera Finder" is an application for searching network cameras, that can currently be viewed from the administrator's personal computer or a user's personal computer, and connecting to those cameras. You can use this application by downloading it from Toshiba website.

● Setting up "Camera Finder"

## 1 Access the following Toshiba Web page from the Internet

URL : http://www.toshiba.com/taisisd

## 2 Create a folder and download the application to the folder

Download the application according to the explanation on the Web page.

## 3 Click the "Setup" file and install the "Camera Finder" following the instruction on the screen

● Using "Camera Finder" to Search for a Camera

## 1 From the "Start" menu, point to "Programs" and "TOSHIBA Network Camera", and then select "Camera Finder"

## 2 Start up "Camera Finder" and click "Search"

・All the cameras currently connected to the network appear.
To clear the results, click "Clear".

## 3 Click the camera you want to login from the list of cameras

・The chosen camera name and IP address is displayed in the Network camera log-in fields.

To login as an administrator

**Click the "Administrator" button.**

・For details on Adminstrator Login procedure, refer to page 42.

To login as a user

**Click the "User" button.**

To close the window without logging in

**Click "Exit" to close "Camera Finder"**

**NOTE**

- Toshiba is not responsible for any damages caused by this software.

# Configuring the Network Manually

## ● Entering an IP address manually

- Enter an IP address manually if you are not using, or do not want to use the DHCP server.
- If you use a DHCP server, the IP address changes from time to time. Therefore, the IP address you set last time may not be valid next time, and you may not able to access to the camera.
  To be able to access the camera every time you use, you need to set fixed IP address (setting IP address manually) to the network camera. If you do not know the pre-assigned IP address,consult the relevant support center or refer to the relevant manuals of the network system devices (router, hub, modem,etc.).

### 1 Perform administrator login (→ page 42) to open the Admin menu.

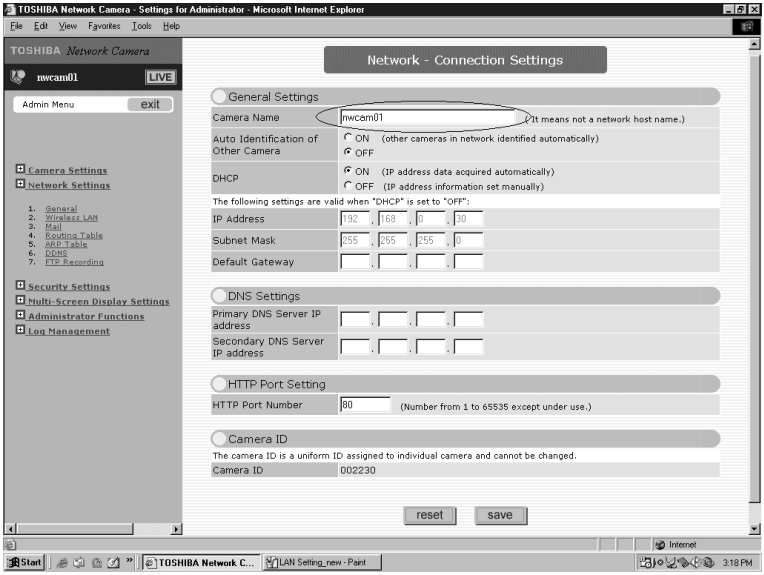
### 2 In the left side of the window, click the toggle (+) of "Network Settings"

- The sub menus appear.

### 3 From the list of sub menus, click "General"

- The settings appear in the right side of the window.

## 4 Enter the camera name




**Important**

- The camera name is displayed along with images in single-view or multi-view screens. If there are multiple cameras, enter a name that will make it easy to identify what the camera is monitoring.

## 5 Set "DHCP" to "OFF"

・The default setting is "ON."

## 6 Enter the IP address, subnet mask, and default gateway

**Important**

- If you do not know the subnet mask, consult the provider or relevant network system administration support center.
- You do not need to enter the default gateway if the network camera will not be accessed from another network. If you do need to enter a default gateway, consult the relevant network system administration support center.

## 7 Click the save button

· The settings are registered.

**NOTE**

- Clicking the reset button restores the previous configuration.
- The network camera has a feature (useful for multi view) that automatically detects, and remember other cameras on the same network. If there are other cameras on the same network, it is recommended to set "Auto Identification of Other Cameras" to "ON" (→page 51).
- For details on configuring multi view, refer to "Multi-Screen Mode Settings" (→page 56).

# Log-in ID and Password

Be sure to change the default login ID and password. You are able to change important information and settings of the camera through the Administrator Login. To have higher security, be sure to change your login ID and the password, and don't forget new login ID and password. Otherwise, you cannot access to the camera. In the case you forget your login ID and password, press "Reset" button (→ page 14, 15) for more than 5 seconds. It will return to the default setting, but remember, in this case, all the information and settings will be gone.

The default login ID is "root" and the default password is "ikwb".

## 1 With the Internet browser displayed on the administrator's personal computer, enter the following URL and press ENTER

http://192.168.0.30/admin.htm (When IP address is in default setting)

If you enter this URL, the Administrator Login screen appears.

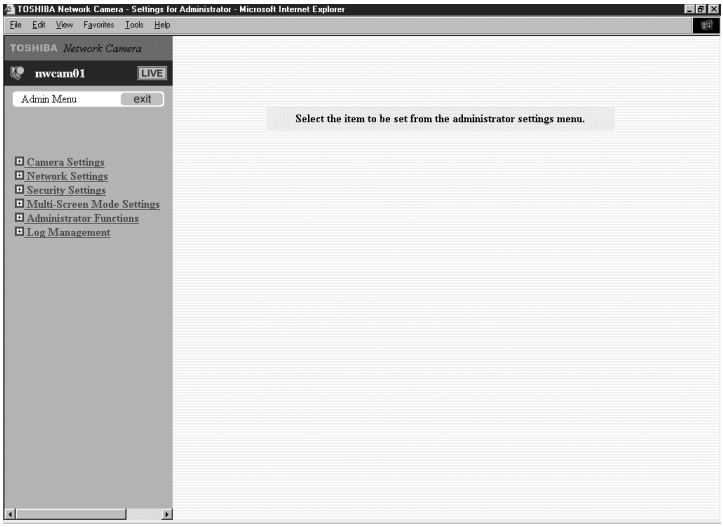
## 2 Correctly enter the administrator login ID and the password, and then click the "login" button

・"Admin Menu" screen appears.

# Log-in ID and Password (Cont.)

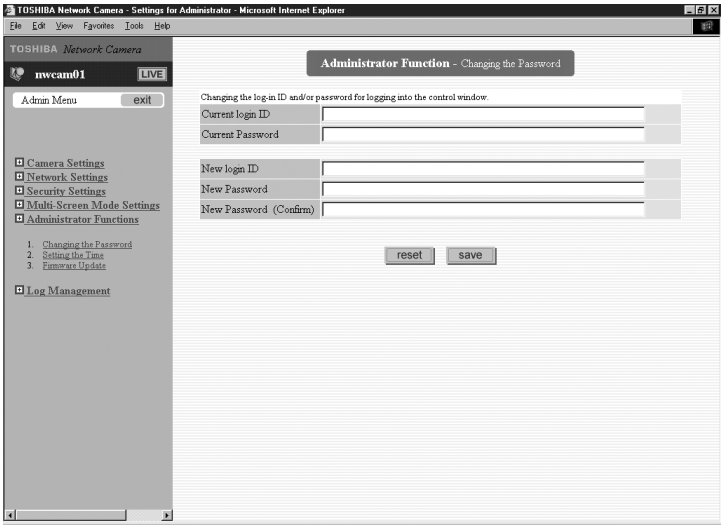
## 3 In the Admin menu, click the toggle (+) of "Administrator Functions"

· The sub menus appear.

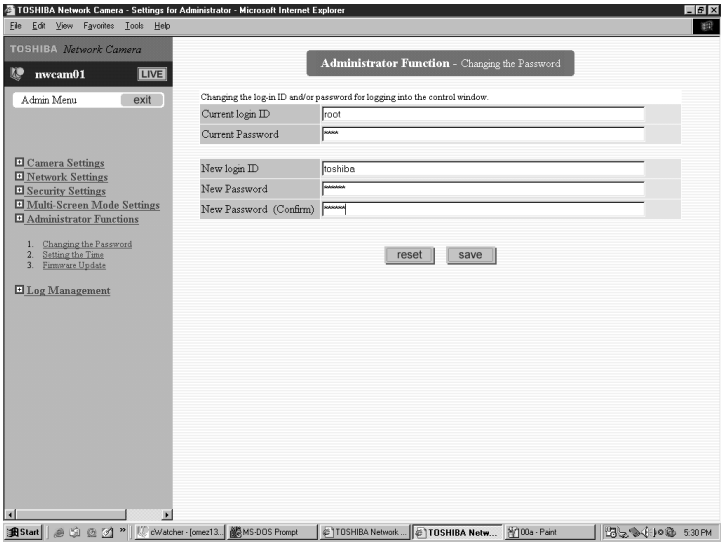



## 4 Click "Changing the Password"

· The settings appear in the right side of the window.



## 5 Enter the login ID and password in the "Current Login ID", "Current Password", "New Login ID", "New Password", and "New Password (Confirm)" fields.




## 6 Click the save button

・The new login ID and password are saved in the network camera.

# Administrator Operation

The viewing of images, listening sound and operating cameras are not restricted to the administrator. The administrator can use all the functions. However, it is necessary for the administrator to log in through the "Administrator Login" screen, because an administrator who logs in from the "User Login" screen is subject to the same restrictions as users.
How to view images, listen sound and operate cameras are explained after the following administrator login procedure.
For details on "user login", refer to the Advanced User's Guide.

※Install "JAVA™2" to display images and output sound correctly on an administrator's personal computer. (→page 12)

## Administrator Login

You must enter the administrator's login ID and password first so that you can be verified as an administrator on the network camera.

### 1 With the Internet browser displayed on the administrator's personal computer, enter the following URL and press ENTER

http://192.168.0.30/admin.htm (When IP address is in default setting)

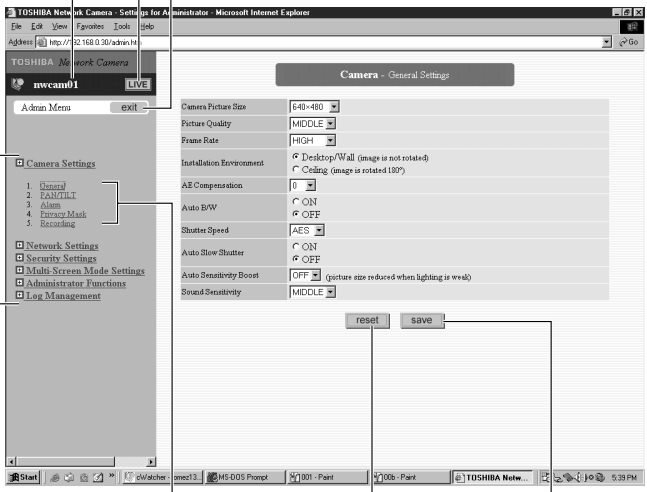
If you enter this URL, the "Administrator Login" screen appears.

### 2 Correctly enter the administrator login ID and the password, and then click the "login" button

・"Admin Menu" screen appears.

# Screen Part Names and Functions

● Admin Menu Screen



# Screen Part Names and Functions (Cont.)

## ● Single View

When you close the Single-View window, close the browser directly by pressing [X] button.

**Camera name**

**Sound button**
Switches sound on/off.

**Multi View button**
Switches the display to multi view. The button is shown only when the multi view function is set "ON".

**Controller button**
Displays the controller.

**Image magnification**
Indicates the magnification of camera images.

**Time and date**
Displays the current time and date or playback time and date of the recorded images.

**Alarm Notification**
Displayed when an alarm is detected.

**SD memory card (IK-WB11A)**
Indicates SD memory card is in use.

**LIVE/PLAYBACK**
LIVE: Displaying live image
PLAYBACK: Displaying recorded image

## ● Multi View

All the buttons and icons, except the button for switching views, function the same as those of single view.

**Single View button**
Displays the upper left screen in single view.

● Administrator Controller

**Camera name**

**Close button**
Closes the controller.

**Scan button**
Moves the lens horizontally back and forth once.

**Auto Patrol button**
Moves the lens automatically at a preset angle.

**Controller buttons**
Adjusts the direction of the lens by panning (left/right) and tilting (up/down). The center button moves the lens to the center position.

**Control buttons for playing recordings**

**1 shot**
Captures one image from camera.

**Back Light button**
Performs back light compensation.

**Zoom in button**
Enlarges camera images.

**Zoom out button**
Reduces camera image.

**LIVE button**
Displays current camera image.

**Preset button**
Displays the Preset controller.

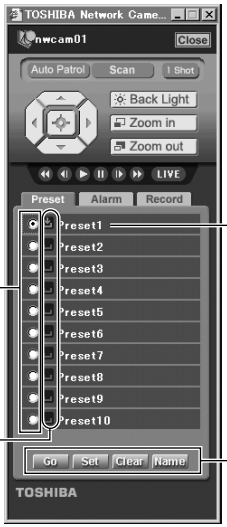
**Alarm button**
Displays the Alarm list controller.

**Record button (IK-WB11A)**
Displays the Record list controller.

※The network camera also has "User's controller".
For the details, see Advanced User's Guide.

# Screen Part Names and Functions (Cont.)

● Preset controller




**Preset name**

**Go button**
Moves the lens to the preset camera position.

**Set button**
Resisters assigned preset camera positions.

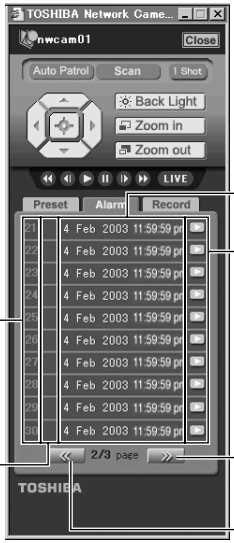
**Clear button**
Deletes assigned preset camera positions and names.

**Name button**
Changes the name of the specified preset.

**Preset Available/Unavailable Icon**
Displays whether the preset is configured.

**Preset Selection button**
Specifies preset.

● Alarm list controller




**Time and date alarm generated**

**Alarm Recording Play button**
Plays the images recorded at the time the alarm was generated.
You can control the recorded images by using "Control buttons for playing recordings". For details, refer to the Advanced User's Guide (See cover page).

Displays next 10 alarms.

Displays previous 10 alarms.

**Alarm type** (☑: Motion Sensor (IK-WB11A), ☑: External Alarm)

**Alarm number**
Displays Alarm numbers from #1 to #100(Max.) in 10s.

● Record list controller (IK-WB11A)

**Time and date of recording**

**Play button**

Plays the images recorded at a time when things are normal.
You can control the recorded images by using "control buttons for playing recordings". For details, refer to the Advanced User's Guide (See cover page).

Displays next 10 recordings.

Displays previous 10 recordings.

**List number**

Displays List numbers from #1 to #168 (Max.) in 10s.

# Setting Items

For more details on the settings, please refer to the Advanced User's Guide at http://www.toshiba.com/taisisd.

## ■ Camera Settings

1 . General Settings

| Item | IK-WB01A | IK-WB11A |
|---|---|---|
| Camera Picture Size | 160 x 120<br>320 x 240<br>640 x 480<br>320 x 240 ZOOM<br>160 x 120 ZOOM | 1280 x 960<br>800 x 600<br>640 x 480<br>320 x 240<br>160 x 120 |
| Picture Quality | HIGH/MIDDLE/LOW | HIGH/MIDDLE/LOW |
| Frame Rate | HIGH/MIDDLE/LOW | HIGH/MIDDLE/LOW |
| Installation Environment | Desktop/Wall, Ceiling | Desktop/Wall, Ceiling |
| AE Compensation | -20 to 20 | -20 to 20 |
| Auto B/W | ON/OFF | ON/OFF |
| Shutter Speed | — | AES,1/120,1/60,1/30,<br>1/20,1/15,1/8,1/4,1/2,1,<br>2,4 |
| Auto Slow Shutter※1 | — | ON/OFF |
| Auto Sensitivity Boost | — | ON/OFF |
| Sound Sensitivity | HIGH/LOW/STOP | HIGH/MIDDLE/LOW/STOP |

※1: Auto-Slow shutter functions when the "shutter speed" is set "AES".

2 . PAN/TILT Settings

| Item | IK-WB01A | IK-WB11A |
|---|---|---|
| P/T Operation Restrictions | None/Administrator Only | None/Administrator Oniy |
| Auto Patrol Stopping Time | 1, 2, 5, 10 minutes | 1, 2, 5, 10 minutes |
| Scan Speed | FAST/SLOW | FAST/SLOW |
| Power Boost Function | CENTER, HOME, AUTO SCAN, AUTO PATROL | CENTER, HOME, AUTO SCAN, AUTO PATROL |
| Freeze Activity Function | ON/OFF | ON/OFF |

3 . Alarm Settings

1 ) External Alarm

| Item | IK-WB01A | IK-WB11A |
|---|---|---|
| Function | ON/OFF | ON/OFF |
| Input Type | Normal Closed (NC)/<br>Normal Opened (NO) | Normal Closed (NC)/<br>Normal Opened (NO) |
| Associate to P/T Operation | OFF, Preset,Auto Patrol | OFF, Preset,Auto Patrol |
| Preset No. | 1 to 10 | 1 to 10 |
| Resume Function | ON/OFF | ON/OFF |
| Resume Time | 10, 30, 60 seconds | 10, 30, 60 seconds |

2) Motion Sensor

| Item | IK-WB01A | IK-WB11A |
|---|---|---|
| Function | — | ON/OFF |
| Sensitivity | — | HIGH, MIDDLE, LOW |
| Size | — | LARGE, MEDIUM, SMALL |
| Detection Range | — | Set from screen ranges of 8X8 squares (See Advanced User's Guide) |
| Associate to P/T Operation | — | OFF, Preset, Auto Patrol |
| Preset No | — | 1 to 10 |
| Resume Function | — | ON/OFF |
| Resume Time | — | 10, 30, 60 seconds |

※ Depending on what the camera is monitoring, the sensor may not work properly.

3) Alarm Output

| Item | IK-WB01A | IK-WB11A |
|---|---|---|
| Output Hold Time | 1, 5, 10, 15, 30, 60 seconds | 1, 5, 10, 15, 30, 60 seconds |

4. Privacy Mask Settings

| Item | IK-WB01A | IK-WB11A |
|---|---|---|
| Function | — | ON/OFF |
| Setup Range | — | Set from screen ranges of 8 x 8 squares (See Advanced User's Guide) |

※ This is an easy image masking function. Depending on angles/movement of PAN/TILT function, the masking positions may shift.

5. Recording Settings

1) Alarm Recording

| Item | IK-WB01A | IK-WB11A |
|---|---|---|
| External Alarm | ON/OFF | ON/OFF |
| Motion Sensor | — | ON/OFF |
| Pre-Recording | 0, 3, 5, 10 frames | 0, 3, 5, 10 frames |
| Post-Recording | 0, 3, 5, 10, 20 frames | 0, 3, 5, 10, 20 frames |
| Recording Cycle※1 | 1, 2, 5, 10 seconds | 1※2, 2, 5, 10 seconds |

※[1] The camera records only one image of the moment alarm has generated when "Pre-Recording" and "Post-Recording" are set to "0 frame."

※[2] You can record Alarm(s) in 1-second cycle when picture size is set to 160x120, 320x240 or 640x480.

# Setting Items (Cont.)

2） Normal Recording (Only Possible when SD Memory Card Inserted)

| Item | IK-WB01A | IK-WB11A |
|---|---|---|
| Function | — | ON/OFF |
| Recording Cycle* | — | 1, 2, 5, 10, 30, 60, 120, 180 seconds |
| Timer Association | — | ON/OFF |

* Image can be recorded with 1 second-recording cycle when picture sizes are 160 × 120, 320 × 240, 640 × 480: 2 seconds-recorded cycle when picture sizes are 800 × 600 , 1280 × 960.
* The frame rate (renewal speed) may become slower when recording images.
* Actual Recording Cycle may differ from your setting when the slow shutter is in use.

3） Timer Recording

| Item | IK-WB01A | IK-WB11A |
|---|---|---|
| Time Setting | — | Start: 0 to 23<br>Stop: 0 to 23 |

4） Overwriting

| Item | IK-WB01A | IK-WB11A |
|---|---|---|
| Function | — | ON/OFF |

* If you'd like to use this function, use SD memory card bigger than 128MB. Otherwise, it may shorten the life of SD memory card.
* When playing the recorded images from SD memory card, you cannot record any images on the card.
* If an SD memory card is used to record both alarm recordings and normal recordings, thirty percent of the total storage space is used for alarm recordings and the rest is used for normal recordings.
* The camera will not record any images when deleting images in the SD memory card.
* The frame rate may become slower when deleting images in the SD memory card.
* When either Alarm recording or Normal recording becomes full even if there are some more spaces in the SD memory card, the camera notifies you that the card is "full."

5） SD Memory Card Formatting

| Item | IK-WB01A | IK-WB11A |
|---|---|---|
| Function | — | Button Selection |

## ■ Network Settings

1. Network Connection Settings

1) General Settings

| Item | IK-WB01A | IK-WB11A |
|---|---|---|
| Camera Name | Enter up to 32 single-byte characters | Enter up to 32 single-byte characters |
| Auto Identification of Other Cameras | ON/OFF | ON/OFF |
| DHCP | ON/OFF | ON/OFF |
| IP Address | Enter the static IP address | Enter the static IP address |
| Subnet Mask | Enter the subnet mask | Enter the subnet mask |
| Default Gateway | Enter the default gateway | Enter the default gateway |

2) DNS Settings

| Item | IK-WB01A | IK-WB11A |
|---|---|---|
| Primary DNS Server IP Address | Enter the IP address | Enter the IP address |
| Secondary DNS Server IP Address | Enter the IP address | Enter the IP address |

3) HTTP Port Setting

| Item | IK-WB01A | IK-WB11A |
|---|---|---|
| HTTP Port No. | Enter the port number | Enter the port number |

4) Camera ID

| Item | IK-WB01A | IK-WB11A |
|---|---|---|
| Camera ID | Cannot be changed | Cannot be changed |

2. Wireless LAN Settings

| Item | IK-WB01A | IK-WB11A |
|---|---|---|
| COM Mode | adhoc, Infrastructure | adhoc, Infrastructure |
| COM Channel | 1 to 11 | 1 to 11 |
| ESS-ID | Enter up to 32 single-byte characters | Enter up to 32 single-byte characters |
| COM Speed | Auto, 11, 5.5, 2.0, 1.0 Mbps | Auto, 11, 5.5, 2.0, 1.0 Mbps |
| Encryption | Off, 64 bit WEP, 128 bit WEP | Off, 64 bit WEP, 128 bit WEP |
| WEP Key | 16 hexadecimal, ASCII text | 16 hexadecimal, ASCII text |
| | 64 bit: 10 characters (hexadecimal digits), 5 characters (ASCII text) 128 bit: 26 characters (hexadecimal digits), 13 characters (ASCII text) | 64 bit: 10 characters (hexadecimal digits), 5 characters (ASCII text) 128 bit: 26 characters (hexadecimal digits), 13 characters (ASCII text) |

# Setting Items (Cont.)

3 . Mail Settings

1) Server Settings

| Item | IK-WB01A | IK-WB11A |
|---|---|---|
| SMTP Server Name | Enter the server name | Enter the server name |
| SMTP IP Address | Enter the IP address | Enter the IP address |
| POP3 Server Name | Enter the server name | Enter the server name |
| POP3 IP Address | Enter the IP address | Enter the IP address |

2) Verification Settings

| Item | IK-WB01A | IK-WB11A |
|---|---|---|
| User ID | Enter the user ID | Enter the user ID |
| Password | Enter the password | Enter the password |
| Password (Confirm) | Reenter the password | Reenter the password |

3) Administrator Mail Settings

| Item | IK-WB01A | IK-WB11A |
|---|---|---|
| Mail Address | Enter the mail address | Enter the mail address |
| Subject of Sent Messages | Enter up to 128 single-byte characters | Enter up to 128 single-byte characters |

4) Conditions for Sending Mail when An External Alarm Goes Off

| Item | IK-WB01A | IK-WB11A |
|---|---|---|
| Send Mail When An External Alarm Goes Off | ON/OFF | ON/OFF |
| Message Body | Enter up to 256 single-byte characters | Enter up to 256 single-byte characters |
| Attach Alarm Picture To Mail | ON/OFF | ON/OFF |

5) Conditions for Sending Mail When Motion is Detected

| Item | IK-WB01A | IK-WB11A |
|---|---|---|
| Conditions for Sending Mail When Motion is Detected | — | ON/OFF |
| Message Body | — | Enter up to 256 single-byte characters |
| Attach Motion Picture To Mail | — | ON/OFF |

6) Attached Picture Size Setting

| Item | IK-WB01A | IK-WB11A |
|---|---|---|
| Attached Picture Size | 640 x 480<br>320 x 240<br>160 x 120<br>160 x 120 ZOOM<br>320 x 240 ZOOM | 1280 x 960<br>800 x 600<br>640 x 480<br>320 x 240<br>160 x 120 |

7) Conditions for Sending Mail when Internal Battery Runs Out Of Power

| Item | IK-WB01A | IK-WB11A |
|---|---|---|
| Send Mail When Internal Battery Runs out | ON/OFF | ON/OFF |
| Out Of Power Message Body | Enter up to 256 single-byte characters | Enter up to 256 single-byte characters |

8) Conditions for Sending Mail When IP Address Is Changed

| Item | IK-WB01A | IK-WB11A |
|---|---|---|
| Send Mail When IP Address is Changed | ON/OFF | ON/OFF |
| Message Body | The IP address is changed.<br>New IP address: ***<br>Subnet mask: ***<br>Default gateway: ***<br>Day, month, year, time<br>Camera Name; *** | The IP address is changed.<br>New IP address: ***<br>Subnet mask: ***<br>Default gateway: ***<br>Day, month, year, time<br>Camera Name; *** |

9) Addresses for Sending Mail (To)

| Item | IK-WB01A | IK-WB11A |
|---|---|---|
| Input fields for up to 10 addresses (To) | · Enter the mail addresses<br>· For each address, you can configure individually whether mail is sent when: an external alarm goes off, the internal battery runs out of power, or the IP address is changed | · Enter the mail addresses<br>· For each address, you can configure individually whether mail is sent when: an external alarm goes off, a motion is detected, the internal battery runs out of power, or the IP address is changed |

10) Addresses for Sending Mail (Cc)

| Item | IK-WB01A | IK-WB11A |
|---|---|---|
| Input fields for up to 10 addresses (Cc) | · Enter mail addresses<br>· For each address, you can configure individually whether mail is sent when: an external alarm goes off, the internal battery runs out of power, or the IP address is changed | · Enter mail addresses<br>· For each address, you can configure individually whether mail is sent when: an external alarm goes off, a motion is detected, the internal battery runs out of power, or the IP address is changed |

# Setting Items (Cont.)

4 . Routing Table Settings

| Item | IK-WB01A | IK-WB11A |
|---|---|---|
| Static Routing Table Settings | Configure the following settings for up to ten entries: destination address, subnet mask, gateway address, and metric | Configure the following settings for up to ten entries: destination address, subnet mask, gateway address, and metric |

5 . ARP Table Settings

1) Static ARP Table Settings

| Item | IK-WB01A | IK-WB11A |
|---|---|---|
| Static ARP Table Settings | Configure the following settings for up to ten entries: IP address, MAC address | Configure the following settings for up to ten entries: IP address, MAC address |

2) Browse ARP Table

| Item | IK-WB01A | IK-WB11A |
|---|---|---|
| ARP Table | List of ARP displayed | List of ARP displayed |

* Clicking the clear button deletes the contents of the ARP table.

6 . DDNS Settings

| Item | IK-WB01A | IK-WB11A |
|---|---|---|
| DDNS | ON/OFF | ON/OFF |
| DDNS User Name | Enter the user name | Enter the user name |
| DDNS Password | Enter the password | Enter the password |
| DDNS Server | Enter the server name | Enter the server name |

7 . FTP Recording Settings

1) Image Recording by FTP

| Item | IK-WB01A | IK-WB11A |
|---|---|---|
| Image Recording by FTP | Periodic Recording by FTP/ When Alarm Goes Off/ OFF | Periodic recording by FTP/ When Alarm Goes Off (Selection of External Alarm and Motion Detection)/ OFF |

2) FTP Server Setup

| Item | IK-WB01A | IK-WB11A |
|---|---|---|
| Server Name | Enter the server name | Enter the server name |
| IP Address | Enter the IP address | Enter the IP address |
| Login ID | Enter the User ID | Enter the User ID |
| Login Password | Enter the password | Enter the password |
| Login Password (Confirm) | Reenter the password | Reenter the password |
| FTP Port Number | 21 | 21 |
| FTP Mode | PORT/PASV | PORT/PASV |
| Connection to FTP Server | Stay connected/ Re-connect | Stay connected/ Re-connect |

3) Conditions for Image Recording by FTP

| Item | IK-WB01A | IK-WB11A |
|---|---|---|
| Booting up Advanced Setting Window | Periodically Recording by Schedule/ When Alarm Goes Off (See Advanced User's Guide) | Periodically Recording by Schedule/ When Alarm Goes Off (See Advanced User's Guide) |

4) Conditions for the Image Accumulation Inside of the Camera

| Item | IK-WB01A | IK-WB11A |
|---|---|---|
| Image Accumulation | — | ON/OFF |
| Image Accumulation Cycle | — | 1*, 2, 5, 10, 15, 30, 60, 120, 300, 600, 900, 1800, 3600 seconds |
| Overwriting | — | ON/OFF |

* You can record images in 1-second cycle when picture size is set to 160x120, 320x240 or 640x480.
* Alarm Recording and Normal Recording (IK-WB11A) functions will be invalidated.
* You cannot attach images to E-mail(s).
* You cannot use the controller's Alarm List and Record List (IK-WB11A) functions.
* All the saved images of the Alarm List and the Record List (IK-WB11A) on the camera will be deleted.
* SD Memory Card will be formatted automatically and all the data in the card will be deleted. (IK-WB11A)

## ■ Security Settings

1. Access Restriction Settings

| Item | IK-WB01A | IK-WB11A |
|---|---|---|
| Restrict Access by IP Address | ON/OFF | ON/OFF |
| IP Address | Enter up to 20 IP addresses | Enter up to 20 IP addresses |

# Setting Items (Cont.)

2 . Filtering Settings

| Item | IK-WB01A | IK-WB11A |
|---|---|---|
| Filtering by MAC Address | ON/OFF | ON/OFF |
| MAC Address | Enter up to 20 MAC addresses | Enter up to 20 MAC addresses |

3 . User Restriction Settings

| Item | IK-WB01A | IK-WB11A |
|---|---|---|
| User Restrictions | ON/OFF | ON/OFF |
| Login ID | Enter the login ID | Enter the login ID |
| Password | Enter the password | Enter the password |
| Password (Confirm) | Reenter the password | Reenter the password |

## ■ Multi-screen Mode Settings

1 . Adding and Removing Cameras

| Item | IK-WB01A | IK-WB11A |
|---|---|---|
| List of Registered Cameras | Enter domain name (or the IP address) and HTTP port number | Enter domain name (or the IP address) and HTTP port number |

2. Selecting Cameras

1) Switching to Multi-Screen Mode Setting

| Item | IK-WB01A | IK-WB11A |
|---|---|---|
| Multi-Screen Mode | ON/OFF | ON/OFF |

2) Selection of Cameras for Multi-screen Display

| Item | IK-WB01A | IK-WB11A |
|---|---|---|
| Selection of Cameras for Multi-screen Display | Select cameras that were registered by searching automatically or by using the administrator function for adding cameras | Select cameras that were registered by searching automatically or by using the administrator function for adding cameras |

## ■ Administrator Functions

1 . Changing the Password

| Item | IK-WB01A | IK-WB11A |
|---|---|---|
| Current Login ID | Enter the current login ID | Enter the current login ID |
| Current Password | Enter the current password | Enter the current password |
| New Login ID | Enter the new login ID | Enter the new login ID |
| New Password | Enter the new password | Enter the new password |
| New Password (Confirm) | Reenter the password | Reenter the password |

## 2 . Setting the Time

1 ) Time Zone

| Item | IK-WB01A | IK-WB11A |
|---|---|---|
| Time Zone | GMT-12:00~GMT+12:00 | GMT-12:00~GMT+12:00 |

2 ) Changing the Time Manually

| Item | IK-WB01A | IK-WB11A |
|---|---|---|
| Date | Select a date from the date boxes | Select a date from the date boxes |
| Time | Select a time from the time boxes | Select a time from the time boxes |

3 ) Changing the Time Using an NTP Server Setting

| Item | IK-WB01A | IK-WB11A |
|---|---|---|
| Function | ON/OFF | ON/OFF |
| NTP Server Host Name | Enter the host name | Enter the host name |
| IP Address for an NTP Server | Enter the IP address | Enter the IP address |

4 ) Quick Time Setting

5 ) Daylight saving setting

| Item | IK-WB01A | IK-WB11A |
|---|---|---|
| Daylight saving | Valid, Invalid | Valid, Invalid |

※ The camera will not record normal images between 1:00AM to 2:00AM (Summer Time) on the last Sunday of October. However, it will record normal images between 1:00AM to 2:00AM (regular time) on the last Sunday of October only if the Normal Recording function is set to "ON".

※ You cannot set the time (between 2:00AM to 3:00AM on the first Sunday of April.) manually if the Daylight saving is set to "valid."

## 3 . Firmware Update

| Item | IK-WB01A | IK-WB11A |
|---|---|---|
| File Name | Download the firmware. Then, select the file by entering the file path or browsing | Download the firmware. Then, select the file by entering the file path or browsing |

## ■ Log Management

1 . Forwarding Settings

| Item | IK-WB01A | IK-WB11A |
|---|---|---|
| Forward Log to Another Server | ON/OFF | ON/OFF |
| Name of Destination Server | Enter the server name | Enter the server name |
| IP Address of Destination Server | Enter the IP address | Enter the IP address |

2 . Browse and Delete Settings

| Item | IK-WB01A | IK-WB11A |
|---|---|---|
| Log List | The list of logs is displayed | The list of logs is displayed |

* Clicking the clear button deletes the logs.

# Specifications

| Model name | IK-WB01A | IK-WB11A |
|---|---|---|
| Image sensor | 1/5-inch CCD | 1/2-inch CCD |
| Effective Picture Element | 350k pixel | 1.45 megapixel |
| Focal length | f=2.6mm | f = 6.0 mm |
| Angle of view | Horizontal: 58° , vertical: 45° , diagonal: 70° | Horizontal: 56° , vertical: 44° , diagonal: 67° |
| Maximum relative aperture | F = 2.8 | F = 1.4 |
| Shutter speed | AES | AES, 1/120, 1/60, 1/30, 1/20, 1/15, 1/8, 1/4, 1/2, 1, 2, 4, sec. |
| Minimum illumination | 2 lx (Frame Rate HIGH)<br>0.7lx (Frame Rate LOW) | 1 lx (Normal, Auto-Sensitivity Boost OFF)<br>0.03 lux (Slow shutter ON) |
| Pan | 112° (-56° to 56° ) | |
| Tilt | 54° (-49° to 5° ) | |
| Pan/tilt presets | 10 positions | |
| Alarm terminal | Input ×1, Output ×1 | |
| Image size | 640×480 320×240 160×120<br>320×240 zoom 160×120 zoom | 1280×960 800×600<br>640×480 320×240 160×120 |
| Image compression method | JPEG | |
| Quality settings | 3 levels | |
| Maximum frame rate | Max. 7.5 fps(640x480),<br>Max. 15 fps(320x240zoom, 160x120zoom) | Max. 7.5 fps(1280x960, 800x600, 640x480),<br>Max. 30 fps(320x240, 160x120) |
| Audio *1 | Available (built-in microphone, PCM) | Available (MIC IN, PCM) |
| Privacy mask feature | Unavailable | Available |
| Motion alarm feature | Unavailable | Available |
| Normal recording feature | Unavailable | Available |
| External storage media | Unavailable | SD memory card |
| Video output | Unavailable | Available *2 |
| Mail notification feature | Available | |
| ND switching mechanism *3 | None | Available |
| Interface | RJ-45 (10Base-T/100Base-TX), wireless LAN (IEEE802.11b) | |
| Protocols | TCP/IP, UDP/IP, HTTP, SMTP, DNS, DHCP, NTP, ARP, ICMP, syslog, DDNS, RNCP, FTP | |
| Power supply voltage | 10V DC | |
| Power consumption | 8W | |
| Guaranteed operating temperature | -20℃ to +50℃ | |
| Guaranteed performance temperature | 0℃ to +40℃ | |
| Guaranteed operating humidity | 80% or less | |
| Storage temperature | -20℃ to +60℃ | |
| Weight | Approx. 600 g (camera only) | Approx. 650 g (camera only) |
| External dimensions | 127 (W)×127 (H)×110 (D)mm (camera only) | |
| Accessories | AC adaptor (1), Power cord (1),<br>Wall attachment (for indoor use) (1),<br>Clamp filter(x2)<br>Screw set, User's Guide,<br>Quick Start Guide,<br>LAN cable (Straight-through cable)(1),<br>Wire Clamp(1) | AC adaptor (1), Power cord (1), Rear cover (waterproof cover and wall attachment holder for indoor and outdoor installation)(1).<br>Sun visor (for outdoor installation)(1),<br>Wall bracket(1), Screw set, User's Guide,<br>Quick Start Guide, LAN cable<br>(Straight-through cable)(1), Wire Clamp(1) |

*1: The sound may not be clear depending on the conditions of the lines.
*2: The image output is for checking the image during installation. Images and sounds are not deliverd, and recording function will not work during installation.
*3: The ND filter makes possible to monitor either outdoor or indoor location by controlling light intensity.

- Designes as specifications may change without prior notice for better improvement.

# MEMO

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**TOSHIBA AMERICA INFORMATION SYSTEMS. INC**
Imaging System Division
9740 Irvine Boulevard,
Irvine California 92618-1697
PhoneNumber: (800)288-1354

V2.0

# LIMITED WARRANTY
## NETWORK CAMERA

The Imaging Systems Division of Toshiba America information Systems, Inc. ("ISD") makes the following limited warranties with regard to this NETWORK Camera ("Product"). These limited warranties extend to the Original End-User ("You[r]").

**One (1) Year Limited Warranty of Labor and Parts** ISD warrants that this Product will perform in accordance with specifications for a period of one (1) year from the date of purchase by Original End-User. During this one (1) year period, ISD will repair or replace the Product, if it does not perform as warranted. In order to take advantage of this Limited Warranty, You must: (a) deliver the Product to an ISD Authorized Service Provider ("ASP"): and (b) pay all transportation and insurance charges for shipment of the Product to the ASP. ISD reserves the right to substitute factory refurbished parts in place of those in need of repair.

**User's Guide (User's manual):** You should read the User's Guide (User's manual) thoroughly before operating this Product. Before seeking warranty service, you should check the troubleshooting guide in the User's Guide (User's manual) and follow the instructions to correct the problem.

**How to Obtain Warranty Service Step-by-step Procedures:** To obtain warranty service, You should:
1. Contact Toshiba at (877) 855-1349 for operation or installation assistance. 877-MYNETCAM
2. Call 877-696-3822. A technical support specialist will help diagnose the problem. If the product requires a hardware repair, Toshiba will refer an ASP who will repair or at Toshiba's discretion, replace the product.
3. Arrange for shipment of the Product to a Toshiba Authorized Service Provider.
4. Securely pack the Product in the original carton and external shipping pack, include a letter explaining the problem with a copy of the bill of sale or proof of purchase.
5. Prepay all transportation and insurance costs.

**Questions?** If you have any questions, please check our web site at http://www.netcam.toshiba.com

**Your Responsibilities:** This Limited Warranty is subject to the following conditions:
1. You must provide the bill of sale or proof of purchase at the time that warranty service is required.
2. You must notify an ASP within thirty (30) days after you discover that the product does not perform in accordance with specifications during the Limited Warranty period.
3. All Warranty Service of this product must be by an ISD Authorized Service Provider.
4. You must pack the Product in its original carton using the original packing material. Then insert the original carton containing the Product into another carton with additional packing material before shipping the Product to an ASP.

**DISCLAIMERS:**
**ALL OTHER EXPRESS OR IMPLIED WARRANTIES ON THIS PRODUCT, INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE HEREBY DISCLAIMED. SOME STATES DO NOT ALLOW THE EXCLUSION OF IMPLIED WARRANTIES OR LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS. SO THE ABOVE LIMITATIONS MAY NOT APPLY TO YOU.**

**IF THIS PRODUCT IS NOT IN GOOD WORKING ORDER AS WARRANTED ABOVE, YOUR SOLE AND EXCLUSIVE REMEDY SHALL BE THE REPAIR OF REPLACEMENT OF THE PRODUCT. IN NO EVENT WILL ISD OR ITS PARENT COMPANY OR ANY ASP BE LIABLE TO YOU OR ANY THIRD PARTY FOR ANY DAMAGES IN EXCESS OF THE PURCHASE PRICE OF THE PRODUCT. THIS LIMITATION APPLIES TO DAMAGES OF ANY KIND, INCLUDING ANY DIRECT OR INDIRECT DAMAGES, LOST PROFITS, LOST SAVINGS OR OTHER SPECIAL, INCIDENTAL, EXEMPLARY OR CONSEQUENTIAL DAMAGES, WHETHER FOR BREACH OF CONTRACT, TORT OR OTHERWISE, OR WHETHER ARISING OUT OF THE USE OF OR INABILITY TO USE SUCH PRODUCT, EVEN IF TAIS, ITS PARENT COMPANY, OR AN ASP HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES OR OF ANY CLAIM BY ANY OTHER PARTY. SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES FOR SOME PRODUCTS, SO THE ABOVE LIMITATIONS OR EXCLUSIONS MAY NOT APPLY TO YOU.**

**THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS, AND YOU MAY ALSO HAVE OTHER RIGHTS WHICH MAY VARY FROM STATE TO STATE.**

**THIS LIMITED WARRANTY SHALL BE VOID IF THE PRODUCT OR PARTS HAVE BEEN SUBJECTED TO MISUSE, ABUSE, ACCIDENT, IMPROPER INSTALLATION, IMPROPER MAINTENANCE, OR USE IN VIOLATION OF ISD'S WRITTEN INSTRUCTIONS, OR WHERE THE PRODUCT HAS BEEN ALTERED OR MODIFIED WITHOUT ISD'S PRIOR AUTHORIZATION, OR UPON THE REMOVAL OR ALTERATION OF ISD'S FACTORY SERIAL NUMBER. LABOR SERVICE CHARGES FOR PRODUCT INSTALLATION, SET UP AND ADJUSTMENT OF CONTROLS ARE NOT COVERED BY THIS LIMITED WARRANTY.**

No person, agent, distributor, dealer, authorized service provider, or company is authorized to change, modify, or extend the terms of this Limited Warranty in any manner whatsoever. The time within which an action must be commenced to enforce any obligation of ISD arising under this Limited Warranty or under any statute, or law of the United States or any state thereof, is herby limited to three (1) years from the date You discovered the problem. This limitation does not apply to impelled warranties arising under state law. Some states do not permit limitation of the time within which You may bring an action beyond the limits provided by state law, so the above provision may not apply to You. This Limited Warranty gives You specific legal rights and you may also have other rights which vary from state to state.

**TOSHIBA AMERICA INFORMATION SYSTEMS, INC.**
Imaging Systems Division

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